

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,905	06/20/2001	Guillermo Antonio Franco	062891.0559	4869
7590 02/08/2005			EXAMINER	
Baker Botts L.L.P.			NGUYEN, SON XUAN	
Suite 600 2001 Ross Ave	nue		ART UNIT	PAPER NUMBER
Dallas, TX 75			2664	
			DATE MAILED: 02/08/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/885,905	FRANCO, GUILLERMO ANTONIO			
Office Action Summary	Examiner	Art Unit			
	SON X. NGUYEN	2664			
The MAILING DATE of this communica Period for Reply	tion appears on the cover sheet w	ith the correspondence address			
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA  - Extensions of time may be available under the provisions of 3 after SIX (6) MONTHS from the mailing date of this communic  - If the period for reply specified above is less than thirty (30) di  - If NO period for reply is specified above, the maximum statutc  - Failure to reply within the set or extended period for reply will, Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	ATION.  7 CFR 1.136(a). In no event, however, may a cation.  ays, a reply within the statutory minimum of thing period will apply and will expire SIX (6) MOI by statute, cause the application to become A	reply be timely filed  ty (30) days will be considered timely.  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed of	on 6/20/2001.				
,	·,				
3) Since this application is in condition for	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) Claim(s) 8-18 and 20-25 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 1-7 and 19 is/are allowed.  6) Claim(s) 9,11,12 and 14-17,25 is/are rejected.  7) Claim(s) 10,13,18 and 20-24 is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers	•				
9) ☐ The specification is objected to by the E 10) ☑ The drawing(s) filed on 20 June 2001 is Applicant may not request that any objection Replacement drawing sheet(s) including the 11) ☐ The oath or declaration is objected to by	s/are: a)⊠ accepted or b)⊡ obje on to the drawing(s) be held in abeya e correction is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO 3) Information Disclosure Statement(s) (PTO-1449 or PT Paper No(s)/Mail Date	-948) Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152) 			

#### **DETAILED ACTION**

### Claim Objections

1. Claims 20-24 are objected to because of the following informalities: They are depending on claims that are not related. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 8-9, 11-12, 14-17, 25 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention U.S 5,361,256 participated by Willibald Doeringer at el. hereinafter referred to as Doeringer.

Regarding claim 8, Doeringer discloses method transmitting data to multiple destinations comprising:

receiving a data portion (Gateway A receives the multicast packet from Subnetwork W; See lines 24-25 of column 10 and Fig. 3);

determining a first destination the data portion (Gateway A determines a first destination, the next hop Gateway B; See lines 29-30 of column 10);

Application/Control Number: 09/885,905

Art Unit: 2664

assigning a first tag to the data portion, the first tag identifying a second destination for the data portion (Gateway A assigns a first tag, target sub network X or Z; Target sub network X or Z implicitly identifies the next hop for multicast packet; See lines 29-34 of column 10);

storing the data portion and the first tag memory (Gateway inherently has memory unit, buffer, to store received multicast packet);

reading data portion and tag from memory and transmitting the data portion to the first destination (Gateway A sends multicast packet to gateway B; See lines 30-31 of column 10);

determining, based the first tag, second tag that identifies a third destination for the data portion (Gateway A determines a second tag, destination G; Destination G implicitly identifies the final destination for multicast packet; See lines 29-34 of column 10);

and storing the second tag in association with the stored data portion (Multicast packet with destination field G is saved Multicast Routing Table MURT; See lines 27-28 of column 10).

Regarding claim 9, Doeringer discloses receiving a data portion comprises receiving an ATM cell at an ATM switch (Data packet).

Regarding claim 11, Doeringer discloses assigning first tag to the data portion comprises associating the first destination with the first tag (Data packet is associated with target sub networks field; See lines 31-34 of column 10).

Regarding claim 12, Doeringer discloses associating the first destination with the first tag comprises accessing list associating a current destination for the data portion with a subsequent destination for the data portion (Multicast Routing Table MURT; See line 27-28 of column10).

Regarding claim 14, Doeringer discloses destination is represented by a memory address (Gateway B is memory address in Forwarding Information Base FBI; See lines 29-30).

Regarding claim 15, Doeringer discloses storing the data portion and the first tag in memory comprises storing the first tag as part of a header of the data portion (Data packet has target sub networks field; See lines 31-34 of column 10).

Regarding claim 16, Doeringer discloses determining, based the first tag, second tag that identifies third destination for the data portion comprises accessing a multicast link table (Multicast Routing Table MURT).

Regarding claim 17, Doeringer discloses the first destination is represented by a memory address (Gateway B is memory address in Forwarding Information Base FBI; See lines 29-30).

Regarding claim 25, Doeringer discloses 25. A system for transmitting data to multiple destinations comprising:

a means for receiving a data portion (Gateway A receives the multicast packet from Sub network W; See lines 24-25 of column 10 and Fig. 3);

Application/Control Number: 09/885,905 Page 4

Art Unit: 2664

a means for determining a first destination for the data portion (Gateway A determines a first destination, the next hop Gateway B; See lines 29-30 of column 10);

a means for assigning a first tag to the data portion, the first tag indicative of a second destination for the data portion (Gateway A assigns a first tag, target sub network X or Z; Target sub network X or Z implicitly identifies the next hop for multicast packet; See lines 29-34 of column 10);

a means for storing the data portion and the first tag in memory (Gateway inherently has memory unit, buffer, to store received multicast packet);

a means for reading the data portion and tag from memory and transmitting the data portion to the first destination (Gateway A sends multicast packet to gateway B; See lines 30-31 of column 10);

a means for determining, based on the first tag, a second tag that identifies a third destination for the data portion (Gateway A determines a second tag, destination G; Destination G implicitly identifies the final destination for multicast packet; See lines 29-34 of column 10);

and a means for storing the second tag in association with the stored data portion (Multicast packet with destination field G is saved Multicast Routing Table MURT; See lines 27-28 of column 10).

Allowable Subject Matter

Application/Control Number: 09/885,905

Art Unit: 2664

- 4. Claims 1-7 and 19 are allowed.
- 5. The following is an examiner's statement for reasons for allowance:

Claims 1 and 19 are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose (a) transmitting a copy of the data portion to the current destination; (b) updating the current destination to be the next destination and updating the next destination tag to have the value of a new next destination tag, the new destination tag indicative of a new next destination; (c) after updating, storing the next destination tag in association with the stored data portion; and repeating steps (a), (b), and (c) at least once. It is noted that the closest prior art, Doeringer at el. (US Patent 5,361,256) shows a method and a system for transmitting a message or data packet from a single sender to a plurality, i.e. a group of receivers, usually called multicasting, within a conventional unicast transmission network. However, Ors et al. fails to disclose or render obvious the above underlined limitations as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

6. Claims 10, 13, 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 09/885,905 Page 6

Art Unit: 2664

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Cukier at el. (U.S 6,101,187) Method and system for multicasting cells in an ATM protocol adapter.
- b) Tang at el. (U.S 6,839,348) System and method for distributing multicasts in virtual local area networks.
- c) Dinstan at el. (U.S 6,654,371) Method and apparatus for forwarding multicast data by relaying IGMP group membership.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON X. NGUYEN whose telephone number is 571-272-6048. The examiner can normally be reached on 8 AM -5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/885,905

Art Unit: 2664

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

\*\*\*

Well